



**Utah Department of Transportation**  
**Region Materials Lab**  
 Independent Assurance  
**Limited Observation of Test Procedures**  
**Report**

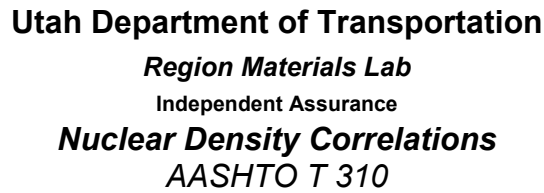


<b>Technician:</b>	<b>Qualification #:</b>
<b>IA Observer:</b>	<b>Date:</b>
<b>Tests Performed:</b>	<b>Project Engineer:</b>
<b>Laboratory or Field Location:</b>	
<b>Comments on Apparatus</b>	
<b>Comments on Materials</b>	
<b>Comments on Procedures</b>	
<b>Tests Performed According to Procedure?</b>	<b>Yes</b> <b>No</b>
<b>If "No" was discrepancy corrected?</b>	<b>Yes</b> <b>No</b>
<b>Split sample date:</b>	

IAI Signature \_\_\_\_\_

Technician Signature \_\_\_\_\_

\_\_\_\_\_  
Region Materials Engineer



**Date Sampled** \_\_\_\_\_ **Time** \_\_\_\_\_  
**Station** \_\_\_\_\_  
**Offset** \_\_\_\_\_  
**Gauge 2 #** \_\_\_\_\_  
**Calibration date** \_\_\_\_\_  
**DS:** \_\_\_\_\_ **MS:** \_\_\_\_\_

	Tech 1	Tech 2	Difference
Depth			
DC/MC			
Dry Density			0.0
Wet Density			0.0
Moisture lbs.			0.0
Moisture %			0.0
Compaction %			0.0

	Tech 1	Tech 2	Difference
Depth			
DC/MC			
Dry Density			0.0
Wet Density			0.0
Moisture lbs.			0.0
Moisture %			0.0
Compaction %			0.0

## Region Materials Engineer

**INDEPENDENT ASSURANCE  
LIMITED OBSERVATION CHECKLIST**

Name \_\_\_\_\_

Qualification # \_\_\_\_\_

Date \_\_\_\_\_

**DETERMINING THE ASPHALT BINDER CONTENT OF HOT MIX ASPHALT (HMA) BY THE  
IGNITION METHOD  
FOP FOR AASHTO T 308****Tests Performed According to Procedure?**

	<b>Yes</b>	<b>No</b>
1. Oven at correct temperature 538°C (1000°F) or correction Factor temperature?	_____	_____
2. Sample reduced to correct size?	_____	_____
3. Mass of sample basket assembly recorded to 0.1 g?	_____	_____
4. With pan below basket(s) sample evenly distributed in basket(s)?	_____	_____
5. Sample conforms to the required mass and mass recorded to 0.1 g?	_____	_____
6. Initial mass entered into furnace controller?	_____	_____
7. Sample correctly placed into furnace?	_____	_____
8. Test continued until stable indicator signals?	_____	_____
9. Uncorrected binder content obtained on printed ticket?	_____	_____
10. Sample mass determined to nearest 0.1 g.?	_____	_____

**If “No” was discrepancy corrected?      Yes      No**

Date of “Split Sample” \_\_\_\_\_

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**Signature of Examiner** \_\_\_\_\_

## INDEPENDENT ASSURANCE LIMITED OBSERVATION CHECKLIST

Name \_\_\_\_\_

Qualification # \_\_\_\_\_

Date \_\_\_\_\_

### THEORETICAL MAXIMUM SPECIFIC GRAVITY AND DENSITY OF BITUMINOUS PAVING MIXTURES FOP FOR AASHTO T 209

**Tests Performed According to Procedure?****Yes****No**

- |  |       |       |
|--|-------|-------|
| 1. Sample reduced to correct size?   | _____ | _____ |
| 2. Particles carefully separated insuring that aggregate is not fractured?   | _____ | _____ |
| 3. After separation, fine aggregate particles not larger than 6.4 mm (1/4in)?  | _____ | _____ |
| 4. Sample at room temperature?   | _____ | _____ |
| 5. Mass of bowl or flask & cover determined to 0.1 g?  | _____ | _____ |
| 6. Mass of sample and bowl or flask & cover determined to 0.1 g?   | _____ | _____ |
| 7. Mass of sample calculated and conforms to required size?  | _____ | _____ |
| 8. Water at approximately 25°C (77°F) added to cover sample?   | _____ | _____ |
| 9. Entrapped air removed using partial vacuum for 15 ±2 min?   | _____ | _____ |
| 10. Container and contents agitated continuously by mechanical device or manually by vigorous shaking at intervals of about 2 minutes? | _____ | _____ |
| 11. Flask filled with water?   | _____ | _____ |
| 12. Flask then placed in constant temperature water bath (optional)?   | _____ | _____ |
| 13. Contents at 25 ±1°C (77 ±1.8°F) or temperature taken and Table 2 in FOP used?  | _____ | _____ |
| 14. Mass of filled flask determined to 0.1 g, 10 ±1 minutes after removal of entrapped air completed?                                  | _____ | _____ |
| 15. Flask mass with water determined to nearest 0.1 g?   | _____ | _____ |
| 16. Specific gravity calculated correctly and to 0.001?  | _____ | _____ |
| 17. Density calculated correctly and to 1 kg/m <sup>3</sup> (0.1 lb/ft <sup>3</sup> )?   | _____ | _____ |

**If “No” was discrepancy corrected?      Yes      No**

Date of “Split Sample” \_\_\_\_\_

Signature of Examiner \_\_\_\_\_

**LIMITED OBSERVATION CHECKLIST**

Name \_\_\_\_\_

Qualification # \_\_\_\_\_

Date \_\_\_\_\_

**BULK SPECIFIC GRAVITY OF COMPACTED BITUMINOUS MIXTURES USING SATURATED SURFACE-DRY SPECIMENS  
FOP FOR AASHTO T 166****Tests Performed According to Procedure?****Yes****No**

1. Mass of dry sample in air determined.

a. Dried overnight at  $52 \pm 3^{\circ}\text{C}$  ( $125 \pm 5^{\circ}\text{F}$ ) and at successive 2-hour intervals to constant mass?b. Cooled to room temperature,  $25 \pm 5^{\circ}\text{C}$  ( $77 \pm 9^{\circ}\text{F}$ )?

c. Dry mass determined to 0.1g?

2. Immersed weight determined.

a. Water at  $25 \pm 1^{\circ}\text{C}$  ( $77 \pm 1.8^{\circ}\text{F}$ )?b. Immersed at  $4 \pm 1$  minutes?

c. Immersed weight determined to 0.1g

3. Sample rapidly surface dried with damp cloth?

4. Saturated surface-dry (SSD) mass determined to 0.1g?

5. Specific Gravity calculated to 0.001?

NOTE: Step 1 is not required for laboratory prepared specimens, for specimens obtained in the field, i.e. cores, step 1 may be performed last.

**If "No" was discrepancy corrected?****Yes****No**

Date of "Split Sample" \_\_\_\_\_

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Signature of Examiner \_\_\_\_\_

## INDEPENDENT ASSURANCE LIMITED OBSERVATION CHECKLIST

Name \_\_\_\_\_

Qualification # \_\_\_\_\_

Date \_\_\_\_\_

### MECHANICAL ANALYSIS OF EXTRACTED AGGREGATE FOP FOR AASHTO T 30

**Tests Performed According to Procedure?**

	Yes	No
1. Total dry mass determined to 0.1 g	_____	_____
2. Dry mass agrees with sample mass after ignition ( $M_f$ ) from AASHTO T 308 within 0.1% of $M_f$ ?	_____	_____
3. Sample placed in container and covered with water?	_____	_____
4. Wetting agent added?	_____	_____
5. Contents of container agitated vigorously?	_____	_____
6. Wash water poured through proper nest of two sieves?	_____	_____
7. Washing continued until wash water is clear and no wetting agent remaining?	_____	_____
8. Washed material coarser than 75 $\mu$ m (No. 200) dried to constant mass at 110 $\pm$ 5°C (230 $\pm$ 9°F)?	_____	_____
9. Dry mass after washing determined to 0.1 g?	_____	_____
10. Material sieved on specified sieves?	_____	_____
11. Mass of each fraction of aggregate, including minus 75 $\mu$ m (No. 200), determined and recorded to 0.1 g?	_____	_____
12. Percent passing on each sieve determined correctly to the nearest 0.1% and nearest 0.1% on the 75 $\mu$ m (No. 200)?	_____	_____
13. Percent passing on each sieve reported correctly to the nearest 1% and nearest 0.1% on the 75 $\mu$ m (No. 200)?	_____	_____
14. Does summation of sieve masses check total washed dry mass to within 0.2 percent?	_____	_____

**If "No" was discrepancy corrected?      Yes      No**

Date of "Split Sample" \_\_\_\_\_

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Signature of Examiner \_\_\_\_\_

**INDEPENDENT ASSURANCE  
LIMITED OBSERVATION CHECKLIST**

Name \_\_\_\_\_

Qualification # \_\_\_\_\_

Date \_\_\_\_\_

**GYRATORY COMPACTION OF HMA MIXTURES  
FOP FOR AASHTO T 312****Tests Performed According to Procedure?****Yes****No**

- |  |       |       |
|--|-------|-------|
| 1. Aged mix brought to compaction temperature?                                   | _____ | _____ |
| 2. Base and upper plate of the mold heated to compaction temperature?            | _____ | _____ |
| 3. Paper disks placed on top and bottom?   | _____ | _____ |
| 4. Mix poured into mold all at once?   | _____ | _____ |
| 5. Pressure applied at 600 kPa $\pm$ 18 kPa?                                     | _____ | _____ |
| 6. Specified number of gyrations applied?  | _____ | _____ |
| 7. Compacted specimen removed from mold and allowed to cool to room temperature? | _____ | _____ |
| 8. Sample correct height at required gyrations (115 $\pm$ 5mm)?                  | _____ | _____ |
| 9. Corrected relative density calculated correctly?                              | _____ | _____ |

**If "No" was discrepancy corrected?      Yes      No**

Date of "Split Sample" \_\_\_\_\_

_____
_____
_____
_____

**Signature of Examiner** \_\_\_\_\_